Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

95-LEP-009

FEB 21 1995

Mr. David L. Lundstrom
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. 4th Avenue
Kennewick, Washington 99336

Dear Mr. Lundstrom:

NOTIFICATION OF ENGINEERING CHANGE NOTICE FOR PROJECT W-252, "PHASE II LIQUID EFFLUENT TREATMENT AND DISPOSAL"

Reference: WHC-SD-W252-ER-001, "Phase II Liquid Effluent Program (Project W-252) Wastewater Engineering Report and BAT/AKART Studies," dated September 1, 1992. 23930

Enclosed is an Engineering Change Notice (ECN), Enclosure 1, documenting the results of a reevaluation on the best available technology/all known, available, and reasonable methods of prevention, control, and treatment (BAT/AKART) for the 244-AR vault facility covered by the "240" Engineering Report for Project W-252 (Reference). Based on this reevaluation, the U.S. Department of Energy, Richland Operations Office (RL) has changed the BAT/AKART decision from Alternative 2: Additional source control, to Alternative 1: Current status.

The "240" Engineering Report originally selected additional source control as the BAT/AKART for the 244-AR vault facility. An assumption in that analysis was that the vault would continue to operate and continue to have a combined discharge of approximately 16 gallons per minute (gpm). Since this report was issued, however, the mission for the 244-AR vault has changed. The facility has been shutdown and will be decontaminated and decommissioned pending availability of funds. The only flow from the facility will be a minor steam condensate flow when the vessel vent heater is operated. This is an infrequent operation of short duration that is required to transfer the sump contents. This will occur only one to two times per year for less than three days each. The flow rate of the condensate is less than 0.5 gpm. This periodic stream will continue to discharge to the 216-B-3C pond. This remaining stream will be permitted under a categorical WAC-173-216 permit, which includes other steam condensate streams.

Due to the infrequent discharge, minimal flow rate, and shutdown awaiting decontamination and decommissioning status of the facility, Westinghouse Hanford Company (WHC) reevaluated the BAT/AKART decision, and recommended changing to Alternative 1: Current status. A summary of this reevaluation is provided in Enclosure 2. This change has been discussed with your staff, and the enclosed ECN formally documents this change. Please include this ECN as part of your formal approval of the "240" Engineering Report for the W-252 project. The project will proceed on the basis of this RL approved ECN.

Should you have any questions or require additional information please contact Ms. Elizabeth M. Bowers of my staff on 373-9276.

Sincerely,

June M. Hennig, Director
Waste Program Division

WPD:GLS

Enclosures:
1. Engineering Change Notice for Project W-252, "Phase II Liquid Effluent Treatment and Disposal"
2. 244-AR Vault Descoping Analysis for Project W-252

cc: A. J. DiLiberto, WHC
M. A. Selby, Ecology
D. R. Sherwood, EPA
J. D. Williams, WHC
J. T. Luke, WHC

244-AR VAULT

DESCOPING ANALYSIS FOR PROJECT W-252

Reference: WHC 1992, Phase II Liquid Effluent Program (Project W-252) Wastewater Engineering Report and BAT/AKART Studies, Rev. 0, Westinghouse Hanford Company, Richland, Washington

INTRODUCTION

A part of the current scope of Project W-252, "Phase II Liquid Effluent Treatment and Disposal," is to apply best available treatment/all known, available, and reasonable treatment (BAT/AKART) to certain effluent streams from the 244-AR vault facility. In 1992, when the engineering report (Reference report) was prepared, the 244-AR vault had an ongoing mission and approximately 16 gallons per minute (gpm) of cooling and condensate effluent from 16 documented streams.

In 1994, however, the mission for the 244-AR vault was canceled, and the facility is currently shutdown awaiting funding for decontaminating and decommisioning. Of the 16 streams analyzed in the engineering report, only one remains active. This stream is stream number 6 in the report. It is a steam condensate stream that is present when the vessel vent heater is operated. The vessel vent heater operates when tank contents are transferred. It is anticipated that vessel vent heater will operate no more than twice a year at a duration of 2-3 days. This operation generates approximately 1/3 gpm of steam condensate.

ANALYSIS

Since the assumptions used in the engineering report for this facility have changed significantly, the project scope in Project W-252 for this facility is no longer correct. The scope of the project as budgeted includes a closed loop cooling system for most of the 16 streams, and the addition of a vessel vent electric heater to delete the vessel vent condensate stream. The total budget for this portion of the W-252 project is $1.5M.

Four options for addressing this change in criteria were evaluated.

1 - Do nothing. Leave the scope of the project as described in the Engineering Report.

2 - Delete all of the scope associated with the cooling loops, but leave in the addition of the electric heater to the vessel vent. This descope would save about $800K of the $1.5M budget.

3 - Delete the cooling loop for the discontinued streams and the addition of the heater, but connect the system up to the 200 Area TEDF system. This descope would save about $900K.

4 - Delete all the scope associated with 244-AR vault and reclassify the remaining vessel vent condensate stream as a miscellaneous stream and permit it under the categorical 216 permit. This descope would save all of the $1.5M budget.

DISCUSSION

Option four was selected, as it provides the greatest cost saving. Although it does not eliminate a stream as option 2 would do, it is consistent with the way other steam condensate streams on-site are being permitted. The infrequent usage of the vessel vent heater, now that the facility has been shutdown, also weighed in this decision.

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
J. M. Hennig, RL	D. L. Lundstrom, Ecology	Incoming 9501152 Xref 9550376

Subject: NOTIFICATION OF ENGINEERING CHANGE NOTICE FOR PROJECT W-252, "PHASE II LIQUID EFFLUENT TREATMENT AND DISPOSAL

INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	
		B. P. Atencio	H6-25	
		D. J. Carrell	H6-22	
		A. J. DiLiberto (Assignee)	H6-10	
		D. W. Fritz	H6-22	
		C. E. Hatch	H6-28	
		G. A. Johnston	R3-35	
		J. R. Kelly	R3-28	
		K. J. Lueck	H6-28	
		J. J. Luke	H6-25	
		S. R. Moreno	B3-06	
		J. L. Waite	B2-35	
		J. D. Williams	H6-28	
		B. D. Williamson	B3-15	
		EDMC	H6-08	